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In The Supreme Court Of The United States

OCTOBER TERM, 1973

No. 73-943-2

THE CITIZENS ENVIRONMENTAL COUNCIL, OAK PARK HOMES ASSOCIATION, CRAIGMONT HOMES ASSOCIATION, ROBERT J. McELWAIN, PHILLIP L. CARR, et al.,
Petitioners,

v.

JOHN VOLPE, WILLIAM D. RUCKELSHAUS, and ROBERT MORRISSEY, et al.,
Respondents.

BRIEF IN OPPOSITION TO PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE TENTH CIRCUIT

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STATEMENT OF THE CASE

The facts giving rise to this cause of action are as follows:

In 1959 a traffic study in the area concerned here was done in the cities of Overland Park and Lenexa, Kansas, close to Kansas City, Kansas, and Kansas City, Missouri. It was proposed that in part a section of road known as the Switzer By-Pass would be built

which would connect to Interstate highway I-35 and I-435. At the time the location was chosen, the area was rural (see Appendix C, Defendants Exhibit Z-1), although the expectation of an increase in population in the area was contemplated.

On April 2, 1959, pursuant to 23 U.S.C.A. 128(A), the Kansas State Highway Commission conducted a public hearing at Olathe, Kansas, to discuss the proposed by-pass.

On August 26, 1959, the Federal Highway Administration Division Engineer approved the project. Approval of the Regional Engineer of the Federal Highway Administration was also obtained.

In 1962, the Federal Highway Administration's Division Engineer, approved the State Highway Commission's request to acquire the proposed right-of-way. Right-of-way acquisition occurred between 1962 and 1964 at a time when the area was still rural in character.

In 1969, Congress enacted 42 U.S.C.A. 4332(2)(C), the National Environmental Policy Act (NEPA) which was to become effective January 1, 1970. Section 102(2) of NEPA requires all federal agencies to submit an Environmental Impact Statement (EIS) in each recommendation for major federal actions significantly affecting the quality of the human environment. The Council on Environmental Quality (CEQ) issued interim guide lines for preparation of the impact statement. It also provided for a draft statement and a final statement. Policy and Pro-

cedure Memorandum (PPM) 20-8 was issued in January, 1969, providing for a corridor hearing and a design hearing. Pursuant to PPM 20-8, the design hearing provides an opportunity to present views on major design features including social, economic, environmental and other affects of alternative designs. The social, economic and environmental considerations include the affects of esthetics, noise, air and water pollution, and displacements of families and businesses.

On April 23, 1971, a design hearing, pursuant to PPM 20-8, was held in the City of Overland Park, Kansas. The final EIS was filed with the CEQ on August 26, 1971. The EIS was prepared by the state, federal and private agencies. The EIS analyzed possible alternative routes, including abandonment of the project, and concluded that they would be in conflict with projected growth patterns. Comments by Mr. Ruckelshaus, Administrator of the Environmental Protection Agency, were included.

On November 16, 1971, the Resident Engineer for the Federal Highway Administration gave the State Highway Commission of Kansas authorization to complete plans for the project with the accompanying design approval.

On November 23, 1971, the plaintiffs' herein filed the case at bar in the United States District Court for the District of Kansas sitting in Topeka, Judge George Templar presiding. Plaintiffs sought a preliminary and permanent injunction restraining the

construction of the 2.7 miles of by-pass. Plaintiffs further sought mandamus to compel an officer of the United States to perform his duty.

On January 3, 1973, Judge Templar sustained defendants' motion for summary judgment and dismissed the plaintiffs' cause of action.

Plaintiffs' filed their appeal to the Tenth Circuit on January 31, 1973. On April 9, 1973, the Circuit Court denied the plaintiffs' motion for injunction pending appeal. On September 19, 1973, the Tenth Circuit affirmed the decision of the District Court.

The contract for the construction of the by-pass was signed on January 23, 1973, calling for a contract price of approximately $4,000,000.00. As of this writing the project is approximately 75 per cent complete with 2.1 million dollars having been paid to the contractors on the project by the State Highway Commission of Kansas.

ARGUMENT

1. Reasons For Not Granting A Writ Of Certiorari

This Court is well aware that Part V, Rule 19, of Supreme Court Rules sets out considerations governing review on certiorari. The Court there set out what is the general law that review is not a matter of right but of sound judicial discretion. 1(a) of Rule 19 sets out the federal question decided by a state court rule. There is no state court involved here, therefore Rule 1(a) is not applicable.

1(b) sets out that where there seems to be conflict

among the various circuits regarding a question, the Supreme Court may grant certiorari. In this case there is no conflict among the circuits concerning the question of whether the Federal Highway Administration should prepare the EIS as opposed to the Kansas State Highway Commission, under the supervision of the Federal Highway Administration, preparing the EIS for a federally funded project (*Iowa Citizens for Environmental Quality, Inc., v. Volpe* F. 2d (2 Cir. 1973); 6 ERC 1088).

The United States Department of Transportation, Federal Highway Administration, has published PPM 90-1 (Appendix A) which is a 21 page document furnished to the Kansas State Highway Commission. The purpose of PPM 90-1 is set out in page 1 of that document and is as follows:

> "To provide guidelines to highway departments and Federal Highway Administration (FHWA) field offices to assure that the human environment is carefully considered and national environment goals are met when developing federally financed highway improvements."

A cursory examination of PPM 90-1 reveals that the Federal Highway Administration is directing the State Highway Commission in every step of the preparation of the EIS. To say that the federal authorities delegate the preparation of the EIS is misleading. When the State Highway Commission is directed, in every particular, on how to compose an EIS by the Federal Highway Administration, the Federal Highway Administration, in fact, draws the EIS.

The Tenth Circuit, in the case at bar, has held that the "Secretary of Transportation did not simply rubber stamp the state's work," rather adopted it as his own work; this is perfectly proper (*Finish Allatoona's Interstate Right, Inc., v. Volpe*, 355 F. Supp. 933 (N.D. Ga. 1973)).

Thus there is not a conflict with "a decision of another court of appeals on the same matter" regarding the question of whether or not it is proper in this case for the State Highway Commission to prepare the EIS.

It should be pointed out that an EIS was made through a joint effort of state, federal and various private agencies and that that EIS was reviewed by the EPA resulting in no comment being made by the EPA. Some eight months later the EPA wrote the "May 4, 1972" letter commenting on inadequate information in the EIS. The letter maintained that there were inadequacies as to noise standards and air standards with a recommendation that new studies should be done in accordance with PPM 90-2. It should be further noted that PPM 90-2 bears a date of February 8, 1973, and is appended hereto as Appendix B. Therefore PPM 90-2 postdates the "May 4 letter" the result of this is that all the standards required to be complied with were met when the Bypass was approved by the Federal Highway Administration and when construction began.

NEPA does not have retroactive application (*Pizitz, Inc., d/b/a Pizitz, et al, v. Volpe*, 467 F. 2d 208 (5th Cir. 1972)).

The EIS, under discussion, is contained in the petition for a writ of certiorari beginning at A31 as Appendix E. An examination of that document together with PPM 90-1 shows that the federal government was in fact directing every step and procedure in the preparation of the document as well as working closely with the State Highway Commission to carry out its duty set out in Title 42 U.S.C. 4332(2) (C) which is known as Section 102(2) (C) of the NEPA of 1969, P.L. 91-190.

The State Highway Commission has appended an aerial photograph of the area, taken in 1959, as Appendix C (which was State Highway Commission's Exhibit Z-1 at trial). Also appended as Appendix D, is a 1970 photograph of the area in question which was State Highway Commission's Exhibit Z-5 at trial). An examination of these two appendixes shows that the land was rural farm land when purchased by the State Highway Commission. Then development occurred up to and bordering the right-of-way which had already been purchased by the State Highway Commission for the purpose of constructing a highway.

In *Finish Allatoona's, supra,* the State Highway Commission prepared the EIS for a federal project to cross park land owned by the federal government. The Court there approved the procedure of the preparation of the EIS. Here we have plowed Kansas farm ground over which a federally funded highway was to be built with the state preparing the EIS in close harmony with, and at the direction of, the Fed-

eral Highway Administration. The Tenth Circuit correctly approved the process and certiorari would not be proper.

2. As to the Citizens Environmental Council's Allegation that sufficient facts exist to set aside the Summary Judgment by the District Court which was later affirmed by the Tenth Circuit.

The State Highway Commission contends that both courts correctly ruled that all the facts were before the court, and that summary judgment was proper.

The defendants' had literally exhibits A through Z-6 at trial for view by the District Court Judge. In the words of the Tenth Circuit "four affidavits were filed by the CEQ to oppose the summary judgment. They are generalized, conclusionary and unsubstantiated. They are insufficient to create a genuine factual dispute." (*Ashwell & Co. v. TransAmerican Ins. Co.*, 407 F. 2d 762 (7th Cir. 1969).

While summary judgment was never meant to be a trial by affidavit, still Rule 56(e) Federal Rules of Civil Procedure requires something more than a generalized, conclusionary and unsubstantiated affidavit to oppose a motion for summary judgment.

The defendants', at the trial level, submitted the affidavit of Robert Morrissey, the Federal Highway Administration official charged with carrying out the NEPA in Kansas, and attached their exhibits thereto in support of their motion for summary judgment.

The affidavit of Morrissey went to what steps were

taken to comply with the applicable law on this particular project. The affidavit most assuredly went to the facts put in issue by the pleading. The affidavit was that of an expert in a case where expert testimony is required.

The CEQ presented nothing to challenge the affidavit of this expert and summary judgment was therefore proper.

CONCLUSION

The State Highway Commission contends that review on certiorari is not here proper under the Court's own rules, Part V, Rule 19, 1(b), as the Tenth Circuit's opinion regarding whether or not the State Highway Commission may prepare the EIS in conjunction with and under the supervision of the appropriate federal agencies is not inconsistent with any other decision of a court of appeals on the same matter. (*Iowa Citizens, supra*)

The State Highway Commission further contends that a declaration by one party in a law suit that facts exist which are in dispute supported by affidavits which are "generalized, conclusionary and unsubstantiated" is not a sufficient basis upon which a genuine issue of fact might be created to successfully oppose a motion for summary judgment which is supported by affidavits of experts in the field in a case where expert testimony is required concerning the very fact issues upon which the case turns and where the affidavit of the expert is unopposed in any way by the adverse party.

It is therefore the position of the State Highway Commission that the writ of certiorari to the Tenth Circuit should be denied.

Respectively submitted,

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APPENDIX A

Transmittal 257

90-1

September 7, 1972

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
POLICY AND PROCEDURE MEMORANDUM

Environmental Impact and Related Statements

Par. 1. Purpose
2. Authority
3. Definitions
4. Policy
5. Application
6. Procedures
Appendix A—Procedures on Historic Preservation
Appendix B—Example of Design Concurrence Letter
Appendix C—Location Stage Flow Chart
Appendix D—Design Stage Flow Chart
Appendix E—Environmental Statements—Contents and Format
Appendix F—Evaluating Highway Section Environmental Effects
Appendix G—Inter-Agency Review of Draft Environmental Statements
Appendix H—Selections from PPM 20-8, for Use in Preparing Environmental Statements
Appendix I—Purchasing Copies of Environmental Statements

1. PURPOSE

To provide guidelines to highway departments and Federal Highway Administration (FHWA) field offices to assure that the human environment is carefully considered and national environmental goals are met when developing federally financed highway improvements.

2. AUTHORITY

a. *Section* 4332(2) (*C*), *Title* 42, *United States Code* (*popularly known as Section* 102(2) (*C*) *of the National Environmental Policy Act of* 1969, *P. L.* 91-190) states in part that all agencies of the Federal Government shall:

"include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible officials on - - -

(i) the environmental impact of the proposed action,

(ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,

(iii) alternatives to the proposed action,

(iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and

(v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

Prior to making any detailed statement, the responsi-

ble Federal official shall consult with and obtain the comments of any Federal agency which has jurisdiction by law or special expertise with respect to any environmental impact involved. Copies of such statement and the comments and views of the appropriate Federal, State, and local agencies which are authorized to develop and enforce environmental standards, shall accompany the proposal through the existing agency review processes."

b. *Section* 1653(*f*), *Title* 49, *United States Code* 1/, *Section* 138, *Title* 23, *United States Code*, (hereafter referred to as "Section 4(f)") permits the Secretary of Transportation to approve a program or project which requires the use of publicly owned land from a park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance as determined by the Federal, State or local officials having jurisdiction thereof, or land from an historic site of national, State, or local significance as so determined by such officials (hereafter "Section 4(f) land") only if:

(1) there is no feasible and prudent alternative to the use of such land, and

(2) such program includes all possible planning to minimize harm to the Section 4(f) land resulting from such use.

c. *Section* 470*f*, *Title* 16, *United States Code* 2/

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1. Section 1653(f), Title 49, United States Code, is identical to Sections 138, Title 23, United States Code, and 4(f) of the Department of Transportation Act as amended by Section 18 of the Federal-Aid Highway Act of 1968."

2. This requirement is also found in Section 106 of the National Historic Preservation Act of 1966.

provides that the head of any Federal agency having direct or indirect jurisdiction over a proposed Federal or federally assisted undertaking in any State and the head of any Federal department or independent agency having authority to license any undertaking shall, prior to the approval of the expenditure of any Federal funds on the undertaking or prior to the issuance of any license, as the case may be, take into account the effect of the undertaking on any district, site, building, structure, or object that is included in the National Register. The head of any such Federal agency shall afford the Advisory Council on Historic Preservation a reasonable opportunity to comment with regard to such undertaking.

d. *Section* 1857*h*-7, *Title* 42, *United States Code* (popularly known as Section 309 of the Clean Air Act of 1970—P.L. 91-604), provides:

"(a) The Administrator (Environmental Protection Agency) shall review and comment in writing on the environmental impact of any matter relating to duties and responsibilities granted pursuant to this chapter or other provisions of the authority of the Administrator, contained in any . . . (2) newly authorized Federal projects for construction and any major Federal agency action (other than a project for construction) to which Section 4332(2) (C) of this Title applies . . . Such written comment shall be made public at the conclusion of any such review."

3. DEFINITIONS (as used in this memorandum)

a. *Highway Section*—a substantial length of highway between logical termini (major crossroads, population centers, major traffic generators, or similar major highway control elements) as normally in-

cluded in a single location study. (See paragraph 6).

b. *Federal Agency Decision*—FHWA approval of the location of a highway improvement (approval of the design; right-of-way acquisition; the plans, specifications, and estimates (PS&E) or authorization to construct a project within the highway section is not, for the purposes of this memorandum, an additional agency decision.)

(1) A decision for a change in either the highway location or design (See paragraph 6p) of sufficient magnitude to require a public hearing or which significantly alters the environmental impact discussed in the statement previously filed would be the basis to prepare and process a supplemental environmental statement.

c. *Environmental Statement*—a written statement containing an assessment of the anticipated significant beneficial and detrimental effects which the agency decision may have upon the quality of the human environment for the purposes of:

(1) assuring that careful attention is given to environmental matters,

(2) providing a vehicle for implementing all applicable environmental requirements, and

(3) to insure that the environmental impact is taken into account in the agency decision.

d. *Negative Declaration*—a written document in support of a determination that, should the proposed highway section improvement be constructed, the anticipated effects upon the human environment will not be significant.

e. *Highway Agency (HA)*—the agency with the primary responsibility for initiating and carrying forward the planning, design, and construction of the highway. For highway sections financed with Federal-aid highway funds, the HA will normally be the appropriate State highway department. For highway sections financed with other funds, such as Forest highways, Park roads, etc., the HA will be the appropriate Federal or State highway agency.

f. *Human Environment*—the aggregate of all external conditions and influences (aesthetic, ecological, biological, cultural, social, economic, historical, etc.) that affect the life of a human.

4. POLICY

It is a national policy that all Federal agencies promote efforts for improving the relationship between man and his environment and to make special effort for preserving the natural beauty of the countryside and public park and recreational lands, wildlife and waterfowl refuges, and historic sites. It is also national policy that Federal agencies consult with other appropriate Federal, State, and local agencies; assess in detail the potential environmental impact in order that adverse effects are avoided and environmental quality is restored or enhanced, to the fullest extent practicable; and utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and decisionmaking which may have an impact on man's environment. The environmental assessments include the broad range of both beneficial and detrimental effects.

5. APPLICATION

a. An environmental statement or combined environmental/Section 4(f) statement or negative declaration, whichever is appropriate, shall be prepared and processed in accordance with this memorandum for each highway section proposed for construction with funds administered by the FHWA, including in appropriate cases any section financed from funds transferred to the FHWA from other agencies, which receives or received design approval (see paragraph 5e) on or after February 1, 1971.

b. An environmental statement or combined environmental/Section 4(f) statement, whichever is appropriate, shall be prepared and processed in accordance with this memorandum for each highway section which received design approval on or after January 1, 1970, and before February 1, 1971, and which constitutes a major action significantly affecting the environment (see Appendix F, paragraphs 2 and 3) if, in the judgment of the FHWA division engineer, implementation of the National Environmental Policy Act to the fullest extent possible requires preparation and processing of an environmental statement. In making his judgment the FHWA division engineer should consider, in addition to the written reassessment prepared by the HA (see paragraph 5c) for each such highway section, the status of the design; right-of-way acquisition including demolition of improvements within the right-of-way; number of families already rehoused and those yet to be rehoused; construction scheduling; benefits to accrue from the proposed highway improvement; significant impacts; and measures to minimize any adverse impacts of the highway.

c. Highway sections which received design approval on or after January 1, 1970, and before February 1, 1971, that are classed as a major action are to be reassessed by the HA in consultation with the FHWA division engineer or his representative. The written reassessment should consider if the highway plans were developed in such a manner as to minimize adverse environmental consequences.

d. A highway section involving an historic site included in the National Register of Historic Places shall be coordinated with the State Liaison Officer for Historic Preservation and representatives of the Office of Archeology and Preservation of the National Park Service, Department of the Interior, as set forth in Appendix A. The provisions of 16 U.S.C. 470f, should be satisfied before submitting the final environment/Section 4(f) statement to the FHWA (see paragraph 2c).

e. Design approval may be regarded as having been obtained prior to February 1, 1971, if any one of the following conditions is satisfied.

(1) Prior to the issuance of revised PPM 20-8 dated January 14, 1969, procedures of the FHWA did not require a HA to receive a formally documented FHWA design approval before undertaking right-of-way acquisition and/or preparation of the plans, specifications and estimate (PS&E). Therefore, design approval was that action or series of actions by which the FHWA indicated to the HA that the essential elements of the highway as set out in PPM 20-8 were satisfactory or acceptable for preparation of the PS&E. Such actions may have consisted of review and comments upon preliminary plans, schematic

drawings, design studies, layouts or reports or unconditional approval to acquire all the right-of-way for a project. The HA shall identify those projects (both Federal-aid and non-Federal-aid) in the above category which it anticipates Federal-aid funds will be requested for a subsequent stage and furnish the FHWA division engineer for his concurrence a letter similar to Appendix B of this memorandum citing the document(s) or action(s) which it believes are equivalent to design approval. The FHWA division engineer's concurrence in the HA's determination will serve as verification that the previous actions or approvals were in effect design approval.

(2) Written approval by the FHWA of the design submitted in accordance with PPM 20-8.

(3) Similar type evidence that an official of the State highway department approved the design prior to February 1, 1971, for projects administered under an approved Secondary Road Plan. Such evidence need not be submitted to the FHWA division engineer for concurrence but shall be available in the State highway department's files.

f. A single environmental statement, or negative declaration, is applicable to jointly planned undertakings between the FHWA and other Federal agencies. The lead agency will be responsible for the appropriate document (i. e. the HA for a proposed highway section that also requires a U. S. Coast Guard action for bridge clearance over navigable water). Highway section proposals submitted for an FHWA approval shall include a copy of the statement prepared and processed by another Federal agency or reference to such a statement previously furnished to FHWA. A

highway section in this category will generally be of the nature where there is no actual transfer of funds to the FHWA and the FHWA acts only in the capacity of a review agency or consultant advisor to the other Federal agency.

g. An environmental statement shall not be required in connection with any highway section that is urgently needed because of a national emergency, a disaster, a catastrophic failure, or similar great urgency. The HA may request and the FHWA may exempt such urgently needed highway sections from the environmental statement requirement after consultation with the Office of the Secretary of Transportation and the Council on Environmental Quality.

6. PROCEDURES (See Appendixes C and D for a flow chart)

The highway section included in an environmental statement should be as long as practicable to permit consideration of environmental matters on a broad scope. Piecemealing proposed highway improvements in separate environmental statements should be avoided. If possible, the highway section should be of substantial length that would normally be included in a multi-year highway improvement program.

a. A proposal to develop or improve a highway section should be coordinated in the early stages with appropriate local, State, and Federal agencies (PPM 20-8 and IM 50-1-70). Initiation of coordination at the beginning of the location study will assist in identifying natural and cultural areas of significance, agency and public concerns, and help in determining the need for and preparation of an environmental

statement. Existing coordination mechanisms, such as above cited, (public hearings, Office of Management and Budget Circular No. A-95 reviews) and other established procedures for coordination should be used to the greatest extent practicable.

(1) The information obtained through coordination and the highway studies (technical, engineering, social, economic, and environmental, as appropriate) should be used in making an assessment of the potential environmental impact (both beneficial and detrimental) of the proposed action. This environmental assessment should be accomplished utilizing a systematic, interdisciplinary aipproach to assure that proper consideration is given to the identification and evaluation of potential environmental impacts. This environmental assessment, performed in consultation with FHWA for all projects, will provide the basis for determining whether an environmental statement will be prepared.

(2) The environmental statement and/or Section 4(f) statement may be a part of the study report for the highway location, if desired; however, if included in the study report, the statements are to be consolidated in one place in the report and in a form that can be reproduced separate from the report.

b. A draft environmental statement shall be prepared only for those sections for which the HA or division engineer determine that construction and operation of the highway section will have a significant impact upon the environment. Appendix F lists guidelines to assist in determining significant impacts associated with the construction and operation of a highway. In addition, the HA or FHWA may wish to

consult other local, State and Federal agencies with specific expertise when determining the significance of an impact. The draft environmental impact statements, including Section 4(f) information, shall be prepared and circulated by the HA in cooperation with the FHWA during the location study. A representative of the FHWA division office shall indicate his review and adoption of the draft environmental statement by signing and dating before it is released for comment.

c. The draft environmental statement, including necessary Section 4(f) information when required, is to be circulated by the HA to the appropriate agencies (see Appendix G) for comment, and made available to the public not later than the first required notice of location public hearing (30 to 40 days before date of hearing) or notice of opportunity for a public hearing as set out in PPM 20-8 (see Appendix H). If the highway section qualifies for exemption from public hearing procedures, a draft environmental statement, if required, (including necessary Section 4(f) information) is to be prepared and circulated for comment, and made available to the public as early as practicable. Regardless of whether or not there is a public hearing, a notice should be placed in the newspaper advising the public that the draft environmental impact statement is going to be circulated for review and comment. The notice should include information on where the statement is available for review and how copies can be obtained.

(1) The HA shall request a determination of significance from the Section 4(f) lands agency and include the letter requesting such determination and

the determination, if received, as exhibits to the draft statement.

(2) An additional location or design public hearing will not be required for the sole purpose of presenting and receiving comments on the draft environmental statement for those projects which were processed in accordance with procedures in effect at the time.

(3) The comments received on the draft statement are to be made available at the HA office for public review.

d. The HA shall furnish 17 copies of each draft environmental statement to the FHWA division engineer who shall distribute 16 copies to the following recipients:

FHWA Regional Office	1
FHWA (to the Office of Environmental Policy, HEV-10)	2
DOT's Office of Environment and Urban Systems (TEU)	3
Council on Environmental Quality (CEQ) 722 Jackson Place, NW. Washington, D. C. 20006	10

NOTE: The HA is to make distribution to all other required local, State, and Federal agencies (see Appendix G).

e. The HA shall announce the availability of and briefly explain the draft environmental statement or negative declaration in its presentation at the location public hearing (or at the highway design hearing when a draft statement is prepared and circulated in conjunction with design studies).

f. The HA may establish a date not less than 30 days from the date of transmittal, plus a normal time for mail to reach and be returned from the recipient, for return of the comments, except 45 days plus mailing time shall be allowed for the Environmental Protection Agency (EPA) to comment. The FHWA division engineer should include a similar time period (30 days plus mailing) for return of comments in his distribution correspondence. If an agency does not respond by the indicated date, the HA may assume the agency had no comments. The HA should endeavor to grant requests for a time extension of up to 15 days for return of comments unless a 45 day review period, plus mailing time, was originally established.

g. Draft environmental statements shall be available for review by the public at the HA headquarters; the State, regional, and metropolitan clearinghouses; the FHWA division, regional, and headquarters offices; and at the appropriate public hearings. The HA and FHWA may charge non-governmental individuals and organizations for copies of environmental statements in accordance with established fee schedules.

(1) The public and private organizations may also order copies of draft and final environmental statements from the National Technical Information Service, U. S. Department of Commerce (See Appendix I).

h. Similar procedures apply to highway sections which have received location approval but did not have design approval before February 1, 1971. In such instances the environmental statement, combina-

tion environmental/Section 4(f) statement or negative declaration shall be prepared and processed during the design studies. The final environmental statement or negative declaration for such highway sections shall be furnished to FHWA before or with the request for design approval. If the design public hearing was held prior to the issuance of this memorandum, an additional design public hearing will not be required for the sole purpose of presenting and receiving comments on the draft statement. All other requirements for circulation for comment and availability to the public will apply.

i. The HA shall prepare a final environmental statement or combined environmental/4(f) statement in consultation with the FHWA for each project for which it prepared and circulated a draft environmental statement following the format in Appendix E. The final statement shall include a copy of all comments received and the consideration and disposition of environmental comments raised at the public hearing and on the draft statement. The correspondence included in the final statement should contain marginal notes indicating where in the statement the comments are treated or discussed (any other suitable method of showing where the comments are discussed is satisfactory).

j. FHWA review and adoption of the final environmental statement shall be the responsibility of the Regional Federal Highway Administrator. The Regional Federal Highway Administrator shall indicate his adoption by signature thereon, and forward 15 signed copies of the final statement to the Office of Environmental Policy, HEV-10. A copy of a signed statement may also be returned to the originating

office. The HA and FHWA may, upon request of an individual or organization, make a copy of the statement as signed by the Regional Federal Highway Administrator available, but such document should be marked "NOT Official—Subject to Approval by U. S. Department of Transportation."

k. FHWA's Office of Environmental Policy shall be responsible for:

(1) submitting copies of the final statement to TEU,

(2) forwarding copies of the final statement to CEQ,

(3) informing the Regional Federal Highway Administrator when CEQ is furnished copies of the final statement.

l. The Regional Federal Highway Administrator shall be responsible for:

(1) assuring that a copy of the final statement as sent to CEQ is furnished the HA; the appropriate State, regional, and metropolitan clearinghouses; and the FHWA division, and

(2) assuring that the following time limitations have expired prior to FHWA's approval of the location (or design if the location was previously approved.)

(a) Ninety (90) days have expired since the draft environmental statement was circulated for comment, sent to CEQ (postmarked), and made available to the public as described in 6g.

(b) Thirty (30) days have expired since the final environmental statement was made available

to both CEQ and the public. This time period may run concurrently with the ninety (90) day period.

m. Negative declarations shall be prepared by the HA when the anticipated impact of construction and operation of a highway section is determined to be not significant (not of major importance). Appendix F outlines several types of highway section improvements which may warrant a negative declaration; however, each highway section should be evaluated to determine whether its impact is significant. Their purpose is to include in the written record evidence that the highway section was evaluated and a determination made that it would have no significant effect upon the quality of human environment. They should be based on the information developed during the highway study and coordination with local, State, and Federal agencies.

n. A negative declaration need not be circulated for comment, but its availability should be included in the notice of the public hearing or opportunity for public hearing. The FHWA division engineer shall concur in the negative declaration before he approves the location or design, whichever is appropriate.

o. The HA or FHWA may, based upon comments at the public hearing, rescind a negative declaration and prepare and process an environmental statement if in their judgment significant impacts have been identified which were not previously considered. It would not be necessary in such instances to hold additional public hearings for the purpose of presenting the draft environmental statement.

p. The HA shall include reference to the previous environmental statement, negative declaration, or reassessment when requesting design approval, authori-

zation for right-of-way acquisition, approval of PS&E, and construction authorization.

(1) A new environmental statement or a supplemental statement will be necessary for a highway section when the proposal being processed introduces a new or changed environmental effect of significance to the quality of environment. The FHWA may also request an environmental statement for a highway section which received design approval before February 1, 1971, when in its judgment changes in the highway subsequent to the reassessment (see paragraph 5c) introduce significantly different impacts on the environment.

(2) A supplemental statement is to be processed in the same manner as a new environmental statement. Where the need for a supplemental statement results from the use of Section 4(f) land only, a Section 4(f) statement may be prepared in lieu of a supplemental environmental statement and coordinated with the Departments of the Interior and Housing and Urban Development by the HA. The coordinated Section 4(f) statement, with comments and suggestions and the HA disposition of same, shall be furnished to the FHWA for appropriate processing.

q. State highway agencies operating in accordance with a Secondary Road Plan approved pursuant to 23 U.S.C. 117 have the responsibility for approval of most Federal-aid project actions, including the highway location and design. However, environmental statements and negative declarations require Federal approvals as indicated in this memorandum.

/s/ R. R. Bartelsmeyer
Acting Federal Highway Administrator

Attachments

PROCEDURES FOR HISTORIC PRESERVATION

1. The provisions of 16 U.S.C. 470(f) require that all proposed highway sections that are federally assisted be developed with consideration to effected districts, sites, buildings, structures, or objects that are included in the National Register for Historic Preservation. This authority derives from Section 106 of the National Historic Preservation Act. Procedures for compliance have been implemented by the Advisory Council on Historic Preservation, and the National Park Service, Department of the Interior, as follows:

a. At the earliest stage of planning or consideration of any undertakings carried out, licensed, or financially assisted by the Federal Government, the HA and FHWA should follow these steps:

(1) Consult the National Register of Historic Places to determine if a National Register property is involved in the undertaking. The National Register is maintained by the Office of Archeology and Historic Preservation, National Park Service, and monthly addenda are published in the FEDERAL REGISTER.

(2) Apply the "Criteria for Effect." If there is no effect, the undertaking may proceed. (See paragraph 3 of this appendix.) This determination of effect should be made by the HA in consultation with the division engineer, the State Liaison Office and a representative of the Office of Archeology and Historic Preservation. If there is documented agreement that a project will not have an effect on the National Register Historic Site, no further review is required under the National Historic Preservation Act.

(3) If there is an effect, the HA in consulta-

tion with the FHWA division engineer, State Liaison Officer[1] and a representative of the Office of Archeology and Historic Preservation of the National Park Service shall:

(a) Determine if the effect is adverse—if not, the undertaking may proceed;

(b) Upon finding an adverse effect, select and agree upon a prudent and feasible alternative to remove the adverse effect, in which case the undertaking may proceed;

(c) Failing to find and agree upon an alternative, recommend all possible planning to minimize the adverse effect and delay further processing of the undertaking pending the receipt of comments from the Advisory Council.

(4) Provide written notice affording the Advisory Council an opportunity to comment upon doubtful or unresolved situations of adverse effect and upon request submit a report of the undertaking.

2. If there is a finding of adverse effect, the proposed highway section is to be processed in accordance with these procedures and the Office of Environmental Policy should be notified and kept informed of further developments. If it becomes necessary to provide a written notice affording the Advisory Council on Historic Preservation an opportunity to comment in doubtful or unresolved situations of adverse effect, the Office of Environmental Policy will act as the coordinating element for the FHWA.

---

1. State Liaison Officers are appointed by the Governors to be responsible for State activities under the National Historic Preservation Act.

3. *Criteria for Effect*

a. A federally financed or licenced undertaking shall be considered to have an effect on a National Register listing (districts, sites, buildings, structures, and objects, including their settings) when any condition of the undertaking creates a change in the quality of the historical, architectural, archeological, or cultural character that qualified the property under the National Register criteria for listing in the National Register.

b. Generally, adverse effect occurs under conditions which include but are not limited to:

(1) Destruction or alteration of all or part of a property;

(2) Isolation from or alteration of its surrounding environment;

(3) Introduction of visual, audible, or atmospheric elements that are out of character with the property and its setting (i. e. introduction of a new highway or a higher type functional highway, such as a freeway for an arterial, into the environment of a historic site).

EXAMPLE OF DESIGN CONCURRENCE LETTER

Mr. John Doe
Division Engineer
Federal Highway Administration

Dear Mr. Doe:

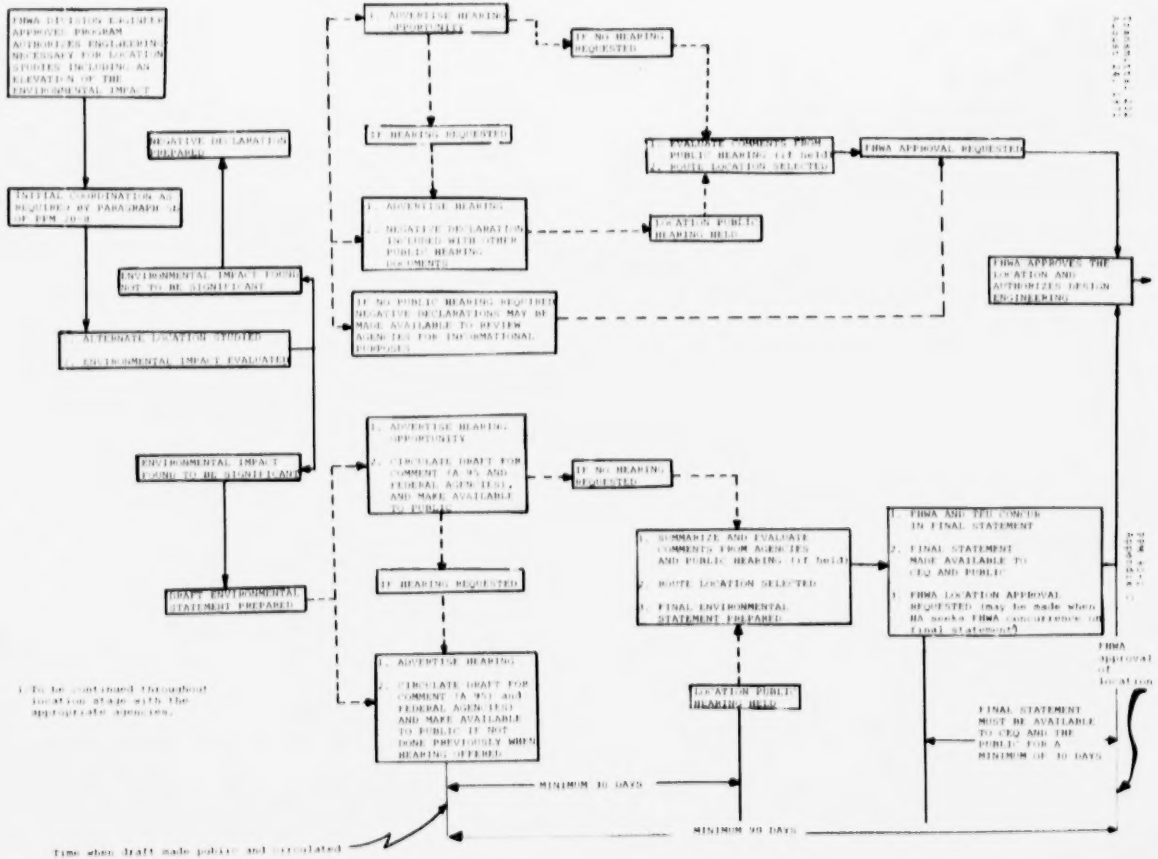
The initial phases (PE - ROW) for the proposed improvement of State Route 35 between State Route 64 and Springfield were accomplished without Federal-aid highway funds. Preliminary drawings, which included the elements outlined in paragraph 10b(1)(b) of PPM 20-8, were commented upon in your letters of August 18, 1966, and September 12, 1967. We have, therefore, determined that your review and comments were equivalent to design approval of this project.

For your convenience we have included below a space for your concurrence in our determination.

Sincerely,

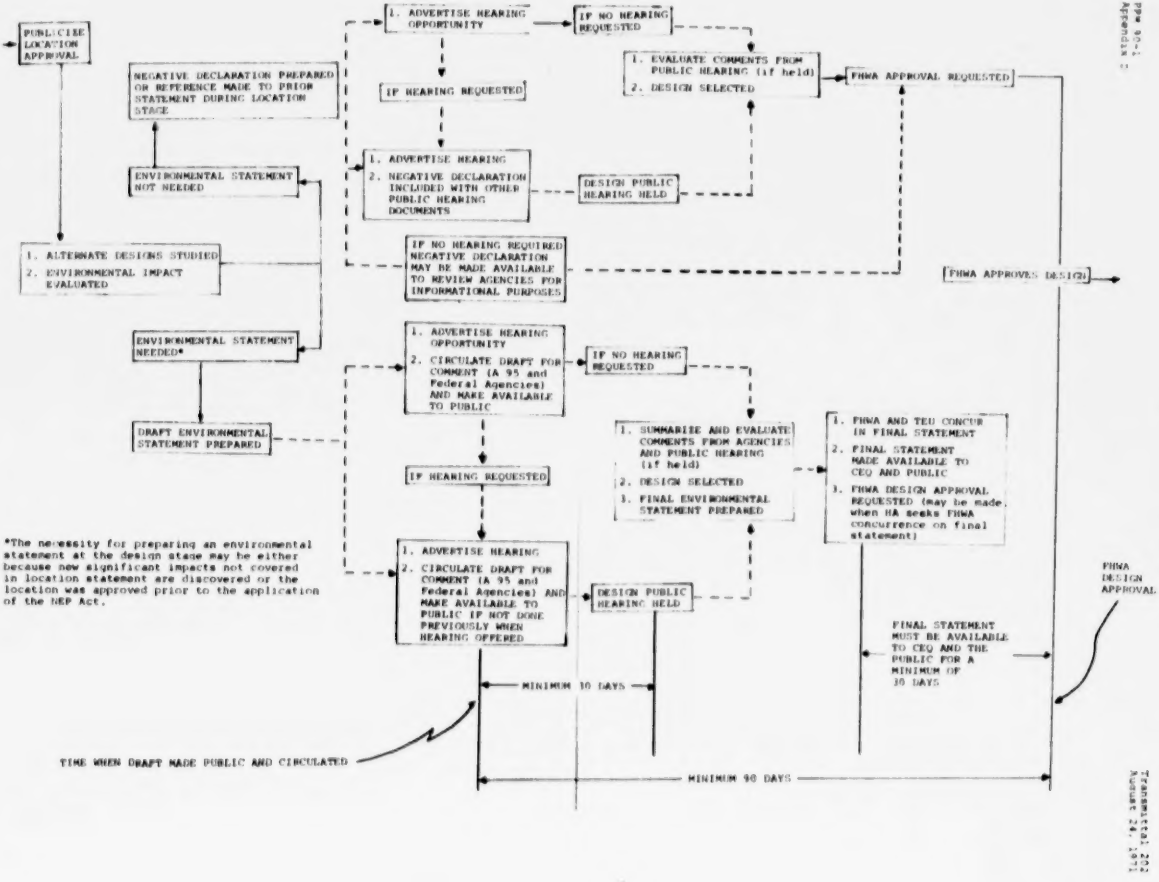
Endorsement to (SHD)

Concur _____ Date _____


FHWA DIVISION ENGINEER APPROVES PROGRAM AUTHORIZES ENGINEERING NECESSARY FOR LOCATION STUDIES INCLUDING AN ELEVATION OF THE ENVIRONMENTAL IMPACT
NEGATIVE DECLARATION PREPARED
INITIAL COORDINATION AS REQUIRED BY PARAGRAPH 7 OF FPM 20-8
ENVIRONMENTAL IMPACT FOUND NOT TO BE SIGNIFICANT
1. ALTERNATE LOCATION STUDIED
2. ENVIRONMENTAL IMPACT EVALUATED
ENVIRONMENTAL IMPACT FOUND TO BE SIGNIFICANT
DRAFT ENVIRONMENTAL STATEMENT PREPARED
1. ADVERTISE HEARING (PUBLICITY)
IF HEARING REQUESTED
1. ADVERTISE HEARING
2. NEGATIVE DECLARATION INCLUDED WITH OTHER PUBLIC HEARING DOCUMENTS
IF NO PUBLIC HEARING REQUIRED NEGATIVE DECLARATIONS MAY BE MADE AVAILABLE TO REVIEW AGENCIES FOR INFORMATIONAL PURPOSES
1. ADVERTISE HEARING OPPORTUNITY
2. CIRCULATE DRAFT FOR COMMENT (A-95 AND FEDERAL AGENCIES), AND MAKE AVAILABLE TO PUBLIC
IF HEARING REQUESTED
1. ADVERTISE HEARING
2. CIRCULATE DRAFT FOR COMMENT (A-95 and FEDERAL AGENCIES) AND MAKE AVAILABLE TO PUBLIC IF NOT DONE PREVIOUSLY WHEN HEARING OFFERED
IF NO HEARING REQUESTED
1. EVALUATE COMMENTS FROM PUBLIC HEARING (IF held)
2. ROUTE LOCATION SELECTED
LOCATION PUBLIC HEARING HELD
1. SUMMARIZE AND EVALUATE COMMENTS FROM AGENCIES AND PUBLIC HEARING (IF held)
2. ROUTE LOCATION SELECTED
3. FINAL ENVIRONMENTAL STATEMENT PREPARED
LOCATION PUBLIC HEARING HELD
FHWA APPROVAL REQUESTED
1. FHWA AND TDC CONCUR IN FINAL STATEMENT
2. FINAL STATEMENT MADE AVAILABLE TO CEQ AND PUBLIC
3. FHWA LOCATION APPROVAL REQUESTED (may be made when HA seeks FHWA concurrence on final statement)
FHWA APPROVES THE LOCATION AND AUTHORIZES DESIGN ENGINEERING
FHWA approval of location
FINAL STATEMENT MUST BE AVAILABLE TO CEQ AND THE PUBLIC FOR A MINIMUM OF 30 DAYS
MINIMUM 30 DAYS
MINIMUM 90 DAYS
Time when draft made public and circulated
1. To be continued throughout location stage with the appropriate agencies.

APPENDIX D

DESIGN STAGE FLOW CHART


PUBLICIZE LOCATION APPROVAL
NEGATIVE DECLARATION PREPARED OR REFERENCE MADE TO PRIOR STATEMENT DURING LOCATION STAGE
ENVIRONMENTAL STATEMENT NOT NEEDED
1. ALTERNATE DESIGNS STUDIED
2. ENVIRONMENTAL IMPACT EVALUATED
ENVIRONMENTAL STATEMENT NEEDED*
DRAFT ENVIRONMENTAL STATEMENT PREPARED
1. ADVERTISE HEARING OPPORTUNITY
IF HEARING REQUESTED
1. ADVERTISE HEARING
2. NEGATIVE DECLARATION INCLUDED WITH OTHER PUBLIC HEARING DOCUMENTS
IF NO HEARING REQUIRED NEGATIVE DECLARATION MAY BE MADE AVAILABLE TO REVIEW AGENCIES FOR INFORMATIONAL PURPOSES
1. ADVERTISE HEARING OPPORTUNITY
2. CIRCULATE DRAFT FOR COMMENT (A 95 and Federal Agencies) AND MAKE AVAILABLE TO PUBLIC
IF HEARING REQUESTED
1. ADVERTISE HEARING
2. CIRCULATE DRAFT FOR COMMENT (A 95 and Federal Agencies) AND MAKE AVAILABLE TO PUBLIC IF NOT DONE PREVIOUSLY WHEN HEARING OFFERED
IF NO HEARING REQUESTED
1. EVALUATE COMMENTS FROM PUBLIC HEARING (if held)
2. DESIGN SELECTED
DESIGN PUBLIC HEARING HELD
IF NO HEARING REQUESTED
1. SUMMARIZE AND EVALUATE COMMENTS FROM AGENCIES AND PUBLIC HEARING (if held)
2. DESIGN SELECTED
3. FINAL ENVIRONMENTAL STATEMENT PREPARED
DESIGN PUBLIC HEARING HELD
FHWA APPROVAL REQUESTED
1. FHWA AND TEU CONCUR IN FINAL STATEMENT
2. FINAL STATEMENT MADE AVAILABLE TO CEQ AND PUBLIC
3. FHWA DESIGN APPROVAL REQUESTED (may be made when HA seeks FHWA concurrence on final statement)
FHWA APPROVES DESIGN
FHWA DESIGN APPROVAL
FINAL STATEMENT MUST BE AVAILABLE TO CEQ AND THE PUBLIC FOR A MINIMUM OF 30 DAYS
MINIMUM 30 DAYS
TIME WHEN DRAFT MADE PUBLIC AND CIRCULATED
MINIMUM 90 DAYS

*The necessity for preparing an environmental statement at the design stage may be either because new significant impacts not covered in location statement are discovered or the location was approved prior to the application of the NEP Act.

PPM 90-1 Appendix D

Transmittal 202 Number 24 - 1971

ENVIRONMENTAL STATEMENTS— CONTENTS AND FORMAT

1. Environmental statements and combination environmental/Section 4(f) statements (draft and final) shall have a title page similar to the examples attached to this Appendix and numbered by the method shown.

2. The following sections, as a minimum, are to be covered in environmental statements:

a. *A description of the proposed highway improvement and its surroundings.* The description should include the following type information: type of facility; length; termini; traffic data; right-of-way width (including existing ROW); lengths on existing and new location; major design features such as number of lanes, access control, location of bridges and interchanges, etc.; a general description of the surrounding terrain, existing land use and proposed land use (a map preferable), and other existing environmental features; existing highway facilities including their deficiencies; the need for the proposal; the benefits to the State, region, and community; an estimate of when the proposal will be constructed; and the current status of the proposal with a brief historical resume. Inventory of economic factors such as employment, taxes, property values, etc., should be included as appropriate. The description should also include any involvement with Section 4(f) land (Paragraph 3 of this Appendix). A vicinity map(s) shall be furnished which will show the proposed highway section and its relationship to surrounding natural and cultural features such as towns, lakes, streams, mountains, historic sites, landmarks, institu-

tions, developed areas, principal roads and highways and similar features that are pertinent to a highway study. Detailed maps, sketches, pictures, and other visual exhibits should be used to show specific environmental involvements as necessary. Maps and layouts of the proposed highway/Section 4(f) land involvement should be sufficiently detailed to give a layman reviewer a reasonable understanding of the highway impact and proposed measures to minimize harm.

b. *The probable impact of the proposed development or improvement.* The evaluation and discussion should specifically emphasize significant beneficial and detrimental environmental consequences upon the State or region or community, as appropriate, of building a new highway into or through an area, or modernizing the existing highway by upgrading and/or relocation.

(1) This section, for instance, would discuss and evaluate the broad impacts on the area or region such as the problems relating to anticipated increase in urbanization or the probable impact of displacing people (if these are significant elements of the highway proposal). Efforts to minimize impact should also be discussed in broad items. For example, measures necessary to insure proper rehousing should be discussed and other differences of the alternatives. The significant environmental impacts of alternative locations and, as appropriate, designs, including a "do nothing" alternative is a proper subject for discussion under "Alternatives" paragraph 2d of this Appendix.

(2) Impacts upon the narrow band (i. e., about 1000 feet) adjacent to the highway may be included

when significant to the whole of the region or community. However, the discussions under this section should address the probable significant impacts of the highway proposal (as opposed to individual alternative locations or designs) which might include the probable impact upon such elements, factors, and features listed in paragraph 3 of Appendix F.

c. *Any probable adverse environmental effects which cannot be avoided should the proposal be implemented* such as water or air pollution, effect upon Section 4(f) land, damage to life systems, urban congestion, threats to health or other consequences adverse to the environment identified under paragraph 2b of this Appendix. Adverse effects should include those which cannot be reduced in severity and those which can be reduced (but not eliminated) to an acceptable level unless the reduction is a result of a different location in which case it should be included in the discussion of alternatives (paragraph 2d of this Appendix).

d. *Alternatives*: The locations and/or designs studied in detail by the HA are to be described (narratively and with maps and other visual aids, as necessary) and the probable beneficial and/or adverse effects of each alternate (including a do-nothing alternative) identified to the extent practicable consistent with the scale of the proposed highway improvement and significance of the impact. The exploration of alternatives should include an objective evaluation and analysis of estimated costs (social and transportation), engineering factors, transportation requirements, and environmental consequences. The description of alternatives will include information, as appropriate, similar to that suggested in paragraph

2a of this Appendix. The discussion of environmental impacts will include more detailed impacts for each alternative that the broad environmental consequences for the corridor identified in paragraphs 2b and 2c of this Appendix. The draft environmental statement should indicate that all alternatives are under consideration and that a specific alternative will be selected by the HA following the public hearing. The final environmental statement will be prepared for the selected alternative. Unless the final statement is included in the location study report (design report when prepared and circulated during design study), the final statement should include a brief discussion of the data supporting the selected alternative. This section should also include a discussion of alternatives to the use of Section 4(f) lands.

e. *The relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity.* The short-term uses should be evaluated (construction, changes in traffic patterns, the taking of natural features such as trees, etc., and man-made features such as homes, churches, etc.) as compared to the long-term effects (foreseen changes in land use resulting from the highway improvement or other similarly related items that may either limit or expand land use, affect water, air, wildlife, etc., and other environmental factors.)

f. *Any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.* Highways require use of natural resources such as forest or agricultural land, however, these are generally not in sufficient quantity to be significant. The improved access and transportation afforded by a highway may generate

other related actions that could reach major proportion and which would be difficult to rescind. An example would be a highway improvement which provides access to a nonaccessible area, acting as a catalyst for industrial, commercial, or residential development of the area.

g. Where unavoidable adverse environmental effects are encountered, planning and measures taken and proposed to minimize harm should be identified. These include procedural and standard measures which are required by standard specifications or standard operating procedures such as erosion control, stream pollution prevention, borrow pit screening or rehabilitation, fencing, relocation of people and businesses, land acquisition procedures, joint development, etc. Measures unique to a specific project should be discussed in detail. Examples of such would be depressing an urban highway to minimize audio and visual effects, providing buffer zones for esthetic purposes, replacement of parklands, etc.

h. *Final statements shall incorporate all comments received on the draft (including environmental comments contained in the public hearing transcript) along with a discussion of the comments and suggestions.* The HA shall describe its disposition of the comments and suggestions (e. g., revisions to the proposed development or improvement to overcome anticipated problems or objections; reasons why specific comments and suggestions could not be accepted; factors of overriding importance prohibiting the incorporation of suggestions, etc.). This section may be added at the end of the review process in the final text of the environmental statement.

i. *Measures to minimize harm to Section 4(f) lands* should be included under a separate paragraph even though discussed elsewhere in the final statement.

j. Each draft and final environmental statement shall include a summary sheet. (See paragraph 4 of this Appendix.)

3. The following information, when pertinent and available, should be included in the combination environmental/Section 4(f) statements. (See paragraphs 2a, 2c, 2d, and 2i of this Appendix.) To the extent practicable, this information should be included in the draft to initiate the necessary interagency review.

a. The description of the project (see paragraph 2a of this Appendix) shall include information about the Section 4(f) land in sufficient detail to permit those not acquainted with the project to have an understanding of the relationship between the highway and park and the extent of the impact, such as:

(1) Size (acres or square feet) and location (maps or other exhibits such as photographs, slides, sketches, etc., as appropriate).

(2) Type (recreation, historic, etc.).

(3) Available activities (fishing, swimming, golf, etc.).

(4) Facilities existing and planned (description and location of ball diamonds, tennis courts, etc.

(5) Usage (approximate number of users for each activity if such figures are available).

(6) Patronage (local, regional, and national).

(7) Relationship to other similarly used lands in the vicinity.

(8) Access (both pedestrian and vehicular).

(9) Ownership (city, county, State, etc.).

(10) If applicable, deed restrictions or reversionary clauses.

(11) The determination of significance by the Federal, State, or local officials having jurisdiction of the Section 4(f) land.

(12) Unusual characteristics of the Section 4(f) land (flooding problems, terrain conditions, or other features that either reduce or enhance the value of portions of the area).

(13) Consistency of location, type of activity, and use of the Section 4(f) land with community goals, objectives, and land use planning.

(14) If applicable, prior use of State or Federal funds for acquisition or development of the Section 4(f) land.

b. A description of the manner in which the highway will affect the Section 4(f) land (include within paragraph 2c of this Appendix) such as:

(1) The location and amount of land (acres or square feet) to be used by the highway.

(2) A detailed map or drawing of sufficient scale to discern the essential elements of the highway/Section 4(f) land involvement.

(3) The facilities affected.

(4) The probable increase or decrease in physi-

cal effects on the Section 4(f) land users (noise, fumes, etc.).

(5) The effect upon pedestrian and vehicular access to the Section 4(f) land.

c. A specific statement (with supporting reasons) that there is no feasible and prudent alternative. (Include in discussion of alternatives, paragraph 2d of this Appendix.)

d. Information to demonstrate that all possible planning to minimize harm is or will be included in the highway proposal. (See paragraph 2i of this Appendix.) Such information should include:

(1) The agency responsible for furnishing the highway right-of-way.

(2) Provisions for compensating or replacing the Section 4(f) land and improvements thereon, including the status of any agreements. (Include agreed upon compensation, replacement acreages, and type land, etc., when known.)

(3) Highway design features developed to enhance the Section 4(f) land or to lessen or eliminate adverse effects (improving or restoring existing pedestrian or vehicular access, landscaping, esthetic treatment, etc.).

(4) Coordination of highway construction to permit orderly transition and continual usage of Section 4(f) land facilities (new facilities constructed and available for use prior to demolishing existing facilities, moving of facilities during off-season, etc.).

e. Evidence that the provisions of 16 U.S.C. 470(f) (Section 106 of the Historic Preservation Act

of 1966) have been satisfied when National Register Properties are involved.

4. *Summary Sheet*

a. Check Appropriate Box(es)

Administrative Action

( ) Draft ( ) Final

( ) Environmental Statement

( ) Combination Environmental/ Section 4(f) Statement

b. Brief description of highway improvement indicating route, termini, length, county, city, State, etc., as appropriate.

c. Summary of environmental impacts (identified in paragraphs 2b and 2 c of this Appendix).

d. Summarize alternatives considered (as described under paragraph 2d of this Appendix).

e. (1) (For draft statements) List Federal, State, and local agencies and other organizations from which comments are being requested.

(2) (For final statements) List Federal, State, and local agencies and other organizations from which comments were requested and identify those that returned written comments.

f. Date draft statement was made available to CEQ (date mailed) which will also be considered the date the draft statement was made available to the public.

A34

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
AND

_____
Appropriate Highway Agency

DRAFT
FINAL — Whichever is appropriate

_____
Environmental Statement or Environmental/Section 4(f) Statement

ADMINISTRATIVE ACTION

for

_____
(Brief Description of Highway Improvement: Route, Termini, County, City, etc.)

THIS HIGHWAY IMPROVEMENT IS PROPOSED FOR FUNDING UNDER TITLE 23, UNITED STATES CODE. THIS STATEMENT FOR THE IMPROVEMENT WAS DEVELOPED IN CONSULTATION WITH THE FEDERAL HIGHWAY ADMINISTRATION AND IS SUBMITTED PURSUANT TO:

42 U.S.C. 4332(2)(C)
and
(when applicable)
49 U.S.C. 1653(f)

FINAL ONLY

Date _____ Signature of Appropriate Highway Agency Official _____

Reserve 3" x 3" space for DOT approval

APPROVED AND ADOPTED BY THE FHWA

Date _____ Signature of FHWA Reviewing Official _____

The number placed at the top left-hand corner of the title page on all draft and final environmental statements is as follows:

FHWA—Az-EIS-72-01-D or F

FHWA—Name of Federal agency
Az—Name of State (cannot exceed four characters)
EIS—Environmental Impact Statement
72—Year draft statement was prepared
01—Sequential number of statement for each calendar year
D or F— D—designates the statement as the draft statement
F—designates the statement as the final statement

The first draft statement prepared each year is numbered one (1) and other draft statements prepared in that same year are numbered sequently in accordance with the date prepared. Final statements carry the same number based upon the date the draft was prepared.

EVALUATING HIGHWAY SECTION ENVIRONMENTAL EFFECTS

1. Draft and final environmental statements should be prepared and processed in accordance with the procedures required by this memorandum for all highway sections falling under one or more of the following three categories:

a. Highway sections where organized opposition has occurred or is anticipated to occur.

b. Highway sections significantly affecting his-

toric or conservation lands (public or private) independent of whether they are Section 4(f) cases.

c. Highway sections which are classed as *major actions* and are also *likely to significantly affect the quality of the human environment.* This category requires a two-step analysis. First, it must be determined if the proposed highway section is a *major* action (paragraph 2 of this Appendix); secondly, the significance of the effects upon the human environment must be determined (paragraph 3 of this Appendix).

2. The following should be used to determine whether a proposal to construct or improve a highway section is a major action.

a. Highway sections entirely or generally on new location.

b. Major up-grading of an existing highway section resulting in a functional characteristic change (e. g., a local road becoming an arterial highway). Such changes usually result by adding lanes, interchanges, access control, medians, etc., and require extensive right-of-way acquisition and construction (grading, base, paving, bridges, etc.) which have the potential of significantly affecting the human environment.

3. Any of the following highway sections should ordinarily be considered as significantly affecting the quality of the human environment.

a. A highway section that is likely to have a significantly adverse impact on natural ecological, cultural, or scenic resources of national, State or local significance.

b. A highway section that is likely to be highly controversial regarding relocation housing resources.

c. A highway section that divides or disrupts an established community or disrupts orderly, planned development or is inconsistent with plans or goals that have been adopted by the community in which the project is located or causes increased congestion.

d. A highway section which involves inconsistency with any national, State or local standard relating to the environment; has a significantly detrimental impact on air or water quality or on ambient noise levels for adjoining areas; involves a possibility of contamination of a public water supply system; or affects ground water, flooding, erosion or sedimentation.

The comments, suggestions and information obtained during the highway studies, including the coordination and evaluation required by paragraphs 5a and 4c of PPM 20-8 will in most instances supply the information necessary to make the determination required above.

4. Negative declarations shall be prepared for all highway sections which are *not major actions* and for highway sections, even though classed as major actions, where it is determined there *is no significant effect upon the quality of human environment* as a result of the study and early coordination. Highway improvements of the following types are *not* likely to have significant impacts upon the environment.

a. Signing, marking, signalization and railroad protective devices.

b. Acquisition of scenic easements,

c. Modernization of an existing highway by resurfacing; less than lane width widening; adding shoulders; auxiliary lanes for localized purposes (weaving, climbing, speed-changing, etc.)

d. Correcting substandard curves,

e. Reconstruction of existing stream crossings where stream channels are not affected,

f. Reconstruction of existing highway/highway or highway/railroad separations,

g. Reconstruction of existing intersections including channelization,

h. Reconstruction of existing roadbed (existing curb to curb for urban cross sections), including minor widening, shoulders and additional right-of-way,

i. Rural two-lane highways on new or existing location which are found to be generally environmentally acceptable to the public and local, State, and Federal officials.

INTER-AGENCY REVIEW OF DRAFT ENVIRONMENTAL STATEMENTS

1. Draft environmental statements are to be circulated to appropriate Federal, State, and local agencies. State and local agency review comments will be solicited from State, regional, and metropolitan clearinghouses. Federal agencies are those having jurisdiction by law or special expertise with respect to any environmental impact involved.

2. Careful attention should be given to the selection of agencies having jurisdiction by law or special ex-

pertise in an anticipated impact to avoid the unnecessary solicitation of agencies. Appendix II to CEQ's guidelines published in the April 23, 1971, Federal Register (copy attached) lists agencies with their respective areas of jurisdiction by law or special expertise. A majority of the areas are the concern of the Departments of Housing and Urban Development, the Interior, Agriculture, and the Environmental Protection Agency.

3. The Department of Housing and Urban Development (HUD) generally deals with urban aspects of historic and archeological sites, flood plains and watersheds, parks, forests, outdoor recreation, noise, congestion, low-income neighborhoods, and urban planning. Draft environmental statements in urban areas and all draft combination environmental/Section 4(f) statements should be furnished to HUD for comment.

a. It is desirable to develop a written understanding with the regional office of HUD about which rural statements it wishes to review. HUD has delegated review of environmental statements to its regional offices.

4. The Department of the Interior has an interest in several environmental impact areas, including energy transmission, land use, historic and archeological sites, flood plains and watersheds, parks, forests, outdoor recreation, erosion, urban congestion, low-income neighborhoods, urban planning, rivers, canals, stream control, and wildlife. It may be advantageous to include the Department of the Interior in the mailing list for all draft environmental statements.

5. The Department of Agriculture is oriented to-

wards rural matters. It has an interest in rural electrical energy transmission, toxins, pesticides, herbicides, land use, flood plains, watersheds, parks, forests, outdoor recreation, erosion, rivers, canals, stream control, and wildlife. Accordingly, it should be furnished draft statements on rural highway sections.

6. The Environmental Protection Agency (EPA) has jurisdiction by law or expertise in all major Federal actions significantly affecting the environment. The EPA should be furnished five copies of all draft statements. Comments should be solicited under both Section 102(2)(C) of the National Environmental Policy Act and Section 309 of the Clean Air Act of 1970.

7. The Department of the Army, Office of the Chief of Engineers (Corps of Engineers), is interested in land use and management (coastal areas and navigable waters), flood plains and watersheds, soil and plant life, transportation (harbors, channels, inlets, inland waterways, locks and dams, dredged spoil disposal), and water quality and pollution control. Early coordination is the best guide in determining if the Corps of Engineers has an interest in commenting on the highway section. This early coordination will establish which projects will subsequently require a Corps of Engineers permit.

8. Other agencies, that should be consulted and furnished a copy of the draft environmental statements for comment, will usually be identified during early coordination.

9. Other administrations within the Department of Transportation will need to be solicited for comment in some cases such as a proposed highway section with

a bridge over navigable water that requires a permit from the Coast Guard. The administration from which comments are sought (preferably local offices) may be contacted directly by the HA.

10. In its letter asking an agency for comment on any anticipated environmental impacts for which the agency has jurisdiction by law or special expertise, *it is suggested that the HA identify which impacts described in the statement the HA would specifically wish discussed.* The Federal agency should be asked to comment on each alternative and, if it desires, state a preference and reasons therefor. When the HA places a time limit on the commenting period, the Federal agencies are to be advised at the time comments are solicited and should be informed that if no comments are received within that time period, the HA will assume that the review agency has no comments to offer. The HA should clearly indicate where responding agencies are to return their comments.

Selections from PPM 20-8, dated January 14, 1969, for use with the National Environmental Policy Act guidelines:

5. COORDINATION

a. When a State highway department begins considering the development or improvement of a traffic corridor in a particular area, it shall solicit the views of that State's resources, recreation, and planning agencies, and of those Federal agencies and local public officials and agencies, and public advisory groups which the State highway department knows or believes might be interested in or affected by the development or improvement.

6. HEARING REQUIREMENTS

a. Both a corridor public hearing and a design public hearing must be held, or an opportunity afforded for those hearings, with respect to each Federal aid highway project that:

(1) Is on a new location; or

(2) Would have a substantially different social, economic or environmental effect; or

(3) Would essentially change the layout or function of connecting roads or streets.

However, with respect to secondary road programs, two hearings are not required on a project covered by paragraph 6(a)(1) or (2) unless it will carry an average of 750 vehicles a day in the year following its completion.

b. A single combined corridor and highway design public hearing must be held, or the opportunity for such a hearing afforded, on all other projects before route location approval, except as provided in paragraph 6.c. below.

c. Hearings are not required for those projects that are solely for such improvements as resurfacing, widening existing lanes, adding auxiliary lanes, replacing existing grade separation structures, installing traffic control devices or similar improvements, unless the project:

(1) Requires the acquisition of additional right-of-way; or

(2) Would have an adverse effect upon abutting real property; or

(3) Would change the layout or function of

connecting roads or streets or of the facility being improved.

7. OPPORTUNITY FOR PUBLIC HEARINGS

a. A State may satisfy the requirements for a public hearing by (1) holding a public hearing, or (2) publishing two notices of opportunity for public hearing and holding a public hearing if any written requests for such a hearing are received. The procedure for requesting a public hearing shall be explained in the notice. The deadline for submission of such a request may not be less than 21 days after the date of publication of the first notice of opportunity for public hearing, and no less than 14 days after the date of publication of the second notice of opportunity for public hearing.

8. PUBLIC HEARING PROCEDURE

a. Notice of public hearing:

(1) When a public hearing is to be held a notice of public hearing shall be published at least twice in a newspaper having general circulation in the vicinity of the proposed undertaking. The notice should also be published in any newspaper having a substantial circulation in the area concerned; such as foreign language newspapers and local community newspapers. The first of the required publications shall be from 30 to 40 days before the date of the hearing, and the second shall be from 5 to 12 days before the date of the hearing. The timing of additional publications is optional.

(2) In addition to publishing a formal notice of public hearing, the State highway department shall

mail copies of the notice to appropriate news media, the State's resource, recreation, and planning agencies, and appropriate representatives of the Departments of Interior and Housing and Urban Development. The State highway department shall also mail copies to other federal agencies, and local public officials, public advisory groups and agencies who have requested notice of hearing and other groups or agencies who, by nature of their function, interest, or responsibility the highway department knows or believes might be interested in or affected by the proposal.

(3) Each notice of public hearing shall specify the date, time, and place of the hearing and shall contain a description of the proposal. To promote public understanding, the inclusion of a map or other drawing as part of the notice is encouraged. The notice of public hearing shall specify that maps, drawings, and other pertinent information developed by the State highway department and written views received as a result of the coordination outlined in Paragraph 5.a. will be available for public inspection and copying and shall specify where this information is available.

PURCHASING COPIES OF ENVIRONMENTAL STATEMENTS

1. A copy of any draft or final environmental statement prepared by a Federal agency can be obtained by sending report number or order number and payment, and return address to the National Technical Information Service, Department of Commerce, Springfield, Virginia 22151.

2. The report number can be obtained from the FHWA or HA while the order number is found at the

end of the summary of each statement in the 102 *Monitor* which is published by the Council on Environmental Quality (722 Jackson Place, NW., Washington, D. C. 20006) and sent to State clearinghouses and other interested agencies.

3. Payment is normally $3.00. Copies over 300 pages require $6.00 and will be noted in the 102 *Monitor*.

APPENDIX B

Transmittal 279

90-2

February 8, 1973

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
POLICY AND PROCEDURE MEMORANDUM

Noise Standards and Procedures

Par. 1. Purpose
2. Authority
3. Noise Standards
4. Applicability
5. Procedures

Appendix A—Definitions
Appendix B—Noise Standards

1. PURPOSE

To provide noise standards and procedures for use by State highway agencies and the Federal Highway Administration (FHWA) in the planning and design of highways approved pursuant to Title 23, United States Code, and to assure that measures are taken in the overall public interest to achieve highway noise levels that are compatible with different land uses, with due consideration also given to other social, economic and environmental effects.

2. AUTHORITY

Sections 109(h) and (i), Title 23, United States Code, state that guidelines shall be promulgated "to

assure that possible adverse economic, social, and environmental effects relating to any proposal project on any Federal-aid system have been fully considered in developing such project, and that the final decisions on the project are made in the best overall public interest, taking into consideration the need for fast, safe and efficient transportation, public services, and the costs of eliminating or minimizing such adverse effects and the following: (1) air, noise, and water pollution; . . ." and that "The Secretary, after consultation with appropriate Federal, State, and local officials, shall develop and promulgate standards for highway noise levels compatible with different land uses and after July 1, 1972, shall not approve plans and specifications for any proposed project on any Federal-aid system for which location approval has not yet been secured unless he determines that such plans and specifications include adequate measures to implement the appropriate noise level standards."

3. NOISE STANDARDS

a. Noise standards are appended as Appendix B. Federal Highway Administration encourages application of the noise standards at the earliest appropriate stage in the project development process.

b. There may be sections of highways where it would be impossible or impracticable to apply noise abatement measures. This could occur where abatement measures would not be feasible or effective due to physical conditions, where the costs of abatement measures are high in relation to the benefits achieved, or where the measures required to abate the noise condition conflict with other important values, such as desirable esthetic quality, important ecological con-

ditions, highway safety, or air quality. In these situations, highway agencies should weigh the anticipated noise impacts together with other effects against the need for and the scope of the project in accordance with other FHWA directives (PPM's 20-8, 90-1, and 90-4).

4. APPLICABILITY

In order to be eligible for Federal-aid participation, all projects to which the noise standards apply shall include noise abatement measures to obtain the design noise levels in these standards unless exceptions have been approved as provided herein.

a. *Projects to which noise standards apply.* The noise standards apply to all highway projects planned or constructed pursuant to Title 23, United States Code, except projects unrelated to increased traffic noise levels, such as lighting, signing, landscaping, safety and bridge replacement. Pavement overlays or pavement reconstruction can be considered as falling within this category unless the new pavement is of a type which produces more noise than the type replaced.

b. *Approvals to Which Compliance with Noise Standards Is Prerequisite.*

(1) Projects for which location was approved prior to July 1, 1972: Compliance with noise standards shall not be a prerequisite to any subsequent approval provided design approval is secured prior to July 1, 1974. If design approval is not secured for such a project prior to July 1, 1974, compliance with the noise standards shall be a prerequisite to securing both design approval and approval of plans and specifications. However, such compliance shall not be a

basis for requiring reconsideration of the highway location or any other approval action which has previously been taken for such projects.

(2) Projects for which location is approved on or after July 1, 1972:

(a) If location approval was requested on or before December 31, 1972, compliance with the noise standards shall be a prerequisite to obtaining design approval and approval of plans and specifications. Compliance with the noise standards shall *not* be a prerequisite to obtaining location approval, nor shall such compliance be a basis for requiring reconsideration of the highway location or any other approval action which has previously been taken for such projects. Combined location and design approval shall be handled in the same manner as separate design approval.

(b) If location approval is requested after December 31, 1972, compliance with the noise standards shall be a prerequisite to obtaining location and design approvals as well as approval of plans and specifications.

5. PROCEDURES

The noise standards should be implemented at the earliest appropriate stage in the project development process. These procedures have been developed accordingly.

a. *Project Development.* A report on traffic noise will be required during the location planning stage and the project design stage. The reports may be sections in the location and design study reports, or

they may be separate. The procedures for noise analysis, identification of solutions, coordination with local officials, and incorporation of noise abatement measures are as follows:

(1) *Nonapplicable Projects.* If a State highway department determines (in accordance with paragraph 4a that noise standards do not apply to a particular project, the requests for location approval and design approval shall contain statements to that effect, including the basis on which the State made its determination.

(2) *Noise Analysis.* For applicable projects, analyses of noise and evaluation of effects are to be made during project development studies using the following general steps:

(a) Predict the highway-generated noise level as described in the standards for each alternative under detailed study.

(b) Identify existing land uses or activities which may be affected by noise from the highway section.

(c) By measurement, determine the existing noise levels for developed land uses or activities.

(d) Compare the predicted noise levels with the design level values listed in the standards. Also compare the predicted noise levels with existing noise levels determined in paragraphs 5a(2)(c). These comparisons will be the basis for determining the anticipated impact upon land uses and activities.

(e) Based upon the noise impacts determined in paragraph 5a(2)(d), evaluate alternative

noise abatement measures for reducing or eliminating the noise impact for developed lands.

(f) Identify those situations where it appears that an exception to the design noise levels will be needed. Prepare recommendations to be included in the traffic noise report. (This report may be a portion of the location and design study reports or it may be a separate report.)

(3) *Location Phase and Environmental Impact Statement Requirements.* To the extent this PPM is applicable to the location phase of projects under paragraph 4, the noise report shall describe the noise problems which may be created and the plans for dealing with such problems for each alternative under detailed study. The level of detail of the noise analysis in the location phase should be consistent with the level of detail in which the location study itself is made. This information including a preliminary discussion of exceptions anticipated, shall be set forth in the location study report and summarized in the environmental impact statement (if one is prepared) and, as appropriate, at the location hearing (for location hearings after December 31, 1972). Studies and reports for highway locations approved before December 31, 1972, need not include an analysis and report on noise. In such instances, the noise analysis and report will be required only for the design approval.

(4) *Design Phase Requirements.* The noise analysis prepared for the location phase is to be updated and expanded using the refined alignment and design information developed during the design studies. The report on traffic noise will include a

detailed analysis of the anticipated noise impact, alternative or proposed abatement measures, discussion of coordination with local officials, and recommended exceptions.

(5) *Coordination with Local Officials on Undeveloped Lands.* Highway agencies have the responsibility for taking measures that are prudent and feasible to assure that the location and design of highways are compatible with existing land use. Local governments, on the other hand, have responsibility for land development control and zoning. Highway agencies can be of considerable assistance to local officials in these efforts with a view toward promoting compatibility between land development and highways. Therefore, for undeveloped lands (or properties) highway agencies shall cooperate with local officials by furnishing approximate generalized future noise levels for various distances from the highway improvement and shall make available information that may be useful to local communities to protect future land development from becoming incompatible with anticipated highway noise levels.

(6) *Noise Abatement Measures for Lands Which are Undeveloped at Time of Location Approval.*

(a) Noise abatement measures are not required for lands which are undeveloped at the time of location approval; however, the highway agency may incorporate noise abatement measures for such undeveloped lands in the project design (if approved by FHWA) when a case can be made for doing so based on consideration of anticipated future land use, future need, expected long term benefits, and the difficulty and increased cost of later incorporating abatement measures.

(b) For land uses or activities which develop after location approval, noise abatement measures should be considered for incorporation in the project in the following situations:

1 It can be demonstrated that all practicable and prudent planning and design were exercised by the local government and the developer of the property to make the activity compatible with the predicted noise levels which were furnished to the local government and especially that a considerable amount of time has elapsed between location approval and highway construction thus limiting local government's ability to maintain control over adjoining land uses.

2 The benefits to be derived from the use of highway funds to provide noise abatement measures is determined to outweigh the overall costs.

3 The noise abatement measures can be provided within the highway's proposed right-of-way or wider rights-of-way or easements acquired for that purpose.

(c) There are some situations where the design noise levels should be applied to lands which are undeveloped at the time of location approval. Some of these instances occur where the development of new land uses or activities is planned at the same time as the highway location studies. Other instances occur where planning for the new development has preceded the highway location studies but the development has been delayed. These types of situations should be treated as though the land use or activity were in existence at the time of location approval provided:

1 The State highway agency is apprised of such prior planning.

2 The construction of the new land use or activity is started prior to highway construction or there is good reason to believe that it will start before highway construction.

(7) *Incorporation of Noise Abatement Measures in Plans and Specifications.* For those projects to which the standards apply, the plans and specifications for the highway section shall incorporate noise abatement measures to attain the design noise levels in the standards, except where an exception has been granted.

(8) *Requests for Exceptions.* Requirements and supporting materials for requests for exceptions to the design noise levels are described in paragraph 2 of Appendix B to this PPM. To the extent possible, consistent with the level of detail of the location study, identifiable exceptions should be reported in the location study report. The request for location approval shall contain or be accompanied by a request for approval of exceptions that have been identified in the location stage. Supporting material may be contained in the location study report. Subsequent requests for review and approval of additional exceptions, if any, will be similarly processed in conjunction with design approval.

b. *Federal Participation*

(1) Shifts in alignment and grade are design measures which can be used to reduce noise impacts. The following noise abatement measures may also be incorporated in a project to reduce highway-generated

noise impacts. The costs of such measures may be included in project costs.

(a) The acquisition of property rights (either in fee or a lesser interest) for providing buffer zones or for installation or construction of noise abatement barriers or devices.

(b) The installation or construction of noise barriers or devices, whether within the highway right-of-way or on an easement obtained for that purpose.

(2) In some specific cases there may be compelling reasons to consider measures to "sound-proof" structures. Situations of this kind may be considered on a case by case basis when they involve such public or non-profit institutional structures as schools, churches, libraries, hospitals, and auditoriums. Proposals of this type, together with the State's recommendation for approval shall be submitted to FHWA for consideration.

c. *Approval Authority*

(1) *Exceptions to the Design Noise Levels.* The FHWA Division Engineer is authorized to approve exceptions to the design noise levels and alternate traffic characteristics for noise prediction as provided in paragraph 3b, Appendix B.

(2) *Noise Prediction Method.* Noise levels to be used in applying the noise standards shall be obtained from a prediction method approved by FHWA. The noise prediction method contained in National Cooperative Highway Research Program Report 117 and the method contained in Department of Transportation, Transportation Systems Center

Report DOT-TSC-FHWA-72-1 are approved as of the date of this issue for use in applying the noise standards. Other noise prediction methods or variations of the above should be furnished to the FHWA Office of Environmental Policy together with supporting and validation information for approval.

R. R. Bartelsmeyer
Acting Federal Highway Administrator

DEFINITIONS (As used in this PPM)

Design Approval—the approval (described in PPM 20-8) given by the Federal Highway Administration (FHWA) (at the request of a State highway department) based upon a design study report and a design public hearing or opportunity therefor. This action establishes FHWA acceptance of a particular design and is prerequisite to authorization of right-of-way acquisition and construction.

Design Noise Level—the noise levels established by the noise standards set forth herein for various land uses or activities to be used for determining traffic noise impacts and the assessment of the need for and type of noise abatement treatment for a particular highway section.

Design Year—the future year used to estimate the probable traffic volume to be used as one of the primary bases for the roadway design. A time 20 years from construction is common for multilane and other major projects. Periods of 5 or 10 years are not uncommon for low volume roads.

Developed Land Uses or Activities—those tracts of land or portions thereof which contain improve-

ments or activities devoted to frequent human use or habitation. The date of issue of a building permit (for improvements under construction or subsequently added) establishes the date of existence. Park lands in categories A and B of Table 1, Appendix B, include all such lands (public and private) which are actually used as parks on the date the highway location is approved and those public lands formally set aside or designated for such use by a governmental agency. Activities such as farming, mining, and logging are not considered developed activities. However, the associated residences could be considered as a developed portion of the tract.

Highway Section—a substantial length of highway between logical termini (major crossroads, population centers, major traffic generators, or similar major highway control elements) as normally included in a single location study.

L10—the sound level that is exceeded 10 percent of the time (the 10th percentile) for the period under consideration. This value is an indicator of both the magnitude and frequency of occurrence of the loudest noise events.

Level of Service C—traffic conditions (used and described in the Highway Capacity Manual-Highway Research Board, Special Report 87) where speed and maneuverability are closely controlled by high volumes, and where vehicles are restricted in freedom to select speed, change lanes, or pass.

Location Approval—the approval (described in PPM 20-8) given by the FHWA (at the request of a State Highway Department) based upon a location study report and a corridor public hearing or oppor-

tunity therefor. This action establishes a particular location for a highway section and is prerequisite to authorization to proceed with the design. (Concurrent location and design approval is sometimes given for projects involving upgrading existing roads. In these instances, location approval is not a prerequisite to authorization of design.)

Noise Level—the weighted sound pressure level obtained by the use of a metering characteristic and weighting A as specified in American National Standard Specifications S1. 4-1971. The abbreviation herein used is dBA.

Operating Speed—the highest overall speed at which a driver can travel on a given highway under favorable weather conditions and under prevailing traffic conditions without at any time exceeding the safe speed as determined by the design speed on a section-by-section basis.

Project Development—studies, surveys, coordination, reviews, approvals, and other activities normally conducted during the location and design of a highway project.

Truck—a motor vehicle having a gross vehicle weight greater than 10,000 pounds and buses having a capacity exceeding 15 passengers.

NOISE STANDARDS

1. *Design Noise Level/Land Use Relationship*

a. The design noise levels in Table 1 (page B-4) are to be used during project development of a highway section to determine highway traffic noise impacts

associated with different land uses or activities in existence at the time of location approval. In addition, the table is to be used to determine the need for abatement measures for traffic generated noise for developed land uses and activities in existence at the time of location approval. Exceptions to the design noise levels may be granted on certain types of highway improvements or portions thereof when the conditions outlined in paragraph 2 are met.

b. The exterior noise levels apply to outdoor areas which have regular human use and which a lowered noise level would be of benefit. These design noise level values are to be applied at those points within the sphere of human activity (at approximate ear level height) where outdoor activities actually occur. The values do not apply to an entire tract upon which the activity is based, but only to that portion in which the activity occurs. The noise level values need not be applied to areas having limited human use or where lowered noise levels would produce little benefit. Such areas would include but not be limited to junkyards, industrial areas, railroad yards, parking lots, and storage yards.

c. The interior design noise level in Category E applies to indoor activities for those situations where no exterior noise sensitive land use or activity is identified. The interior design noise level in Category E may also be considered as a basis for noise abatement measures in special situations when, in the judgment of FHWA, such consideration is in the best public interest. In the absence of noise insulating values for specific structures, interior noise level predictions may be estimated from the predicted outdoor

noise level by using the following noise reduction factors:

Building Type	*Window Condition*	*Noise Reduction Due to Exterior of the Structure*	*Corresponding Highest Exterior Noise Level Which Would Achieve an Interior Design Noise Level of 55 dBA*
All	Open	10 dB	65 dBA
Light Frame	Ordinary Sash Closed	20	75
	With Storm Windows	25	80
Masonry	Single Glazed	25	80
Masonry	Double Glazed	35	90

Noise reduction factors higher than those shown above may be used when field measurements of the structure in question indicate that a higher value is justified. In determining whether to use open or closed windows, the choice should be governed by the normal condition of the windows. That is, any building having year round air treatment should be treated as the closed window case. Buildings not having air conditioning in warm and hot climates and which have open windows a substantial amount of time should be treated as the open window case.

2. *Exceptions*

a. The design noise levels set out in these standards represent the highest desirable noise level conditions. State highway departments shall endeavor to meet the design noise levels in planning, locating, and

designing highway improvements. However, there may be sections of highways where it would be impracticable to apply noise abatement measures. This could occur where abatement measures would not be feasible or effective due to physical conditions, where the costs of abatement measures are high in relation to the benefits achieved or where the measures required to abate the noise condition with other important values, such as desirable esthetic quality, important ecological conditions, highway safety, or air quality.

b. A request for an exception to the design noise levels can be approved by the FHWA provided the highway agency has supported its request by a written summary report demonstrating that the following steps have been taken and outlining the results.

(1) Identified noise sensitive land uses along the section of highway in question which are expected to experience future highway traffic noise levels in excess of the design levels.

(2) Thoroughly considered all feasible measures that might be taken to correct or improve the noise condition.

(3) Weighed the costs or effects of the noise abatement measures considered against the benefits which can be achieved as well as against other conflicting values such as economic reasonableness, esthetic impact, air quality, highway safety, or other similar values, and thereby established that reduction of noise levels to desirable design levels is not in the best overall public interest for that particular highway section.

These decisions must ultimately be based upon case-by-case judgment. However, every effort should be made to obtain detailed information on the costs, benefits and effects involved to assure that final decisions are based on a systematic, consistent and rigorous assessment of the overall public interest.

(4) Considered lesser measures that could result in a significant reduction of noise levels though not to the design levels, and included such partial measures in the plans and specifications to the extent that they meet the test of economic reasonableness, practicability, and impact on other values, in the same manner as outlined in paragraph 2b(3).

c. In reviewing request for exception, the FHWA will give consideration to the type of highway and the width of the right-of-way. New freeway projects and most projects for the major reconstruction or upgrading of freeways allow for the use of noise control measures. Noise control measures are progressively more difficult to apply on other highways, particularly on local roads and streets because of numerous points of access, at-grade intersections, limited ability to acquire additional right-of-way as buffer zones, and the impossibility of altering roadway grades, constructing noise barriers and taking advantage of the terrain and other natural features.

d. Except in the most unusual situations, exceptions will be approved when the predicted traffic noise level from the highway improvement does not exceed the existing ambient noise level (originating from other sources) for the activity or land use in question.

3. *Noise Level Prediction*

a. Noise levels to be used in applying these standards shall be obtained from a predictive method approved by the FHWA. The predictive method and the noise level predictions should account for variations in traffic characteristics (volume, speed, and truck traffic), topography (vegetation, barriers, height, and distance), and roadway characteristics (configuration, pavement type, and grades). In predicting the noise levels, the following traffic characteristics shall be used:

(1) *Automotive volume*—the future volume (adjusted for truck traffic) obtained from the lesser of the design hourly volume or the maximum volume which can be handled under traffic level of service C conditions. For automobiles, level of service C is considered to be the combination of speed and volume which creates the worst noise conditions. For those highway sections where the design hourly volume or the level of service C condition is not anticipated to occur on a regular basis during the design year, the average hourly volume for the highest 3 hours on an average day for the design year may be used.

(2) *Speed*—the operating speed (as defined in the Highway Capacity Manual) which corresponds with the design year traffic volume selected in paragraph 3a(1) and the truck traffic predicted from paragraph 3a(3). The operating speed must be consistent with the volume used.

(3) *Truck volume*—the design hourly truck volume shall be used for those cases where either the design hourly volume or level of service C was used for the automobile volume.

Where the average hourly volume for the highest 3 hours on an average day was used for automobile traffic, comparable truck volumes should be used.

b. There are instances where activities associated with a particular land use (such as churches, schools, and resort hotels or residences) do not coincide with design hourly volumes. This may be particularly true when the design hourly volumes are seasonally oriented or where the activity associated with the land use is somewhat infrequent. There are other instances where changes in land use can be reasonably expected to occur before design year volumes are realized. In such instances, State highway agencies may request approval to compute noise predictions using traffic characteristics different from those specified in paragraph 3a. Such requests should be made on a project-by-project basis and should be accompanied by a justification.

TABLE 1

DESIGN NOISE LEVEL/LAND USE RELATIONSHIPS

Land Use Category	*Design Noise Level—L_{10}*	*Description of Land Use Category*
A	60dBA (Exterior)	Tracts of lands in which serenity and quiet are of extraordinary significance and serve an important public need, and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose. Such areas could include amphitheaters, particular parks or portions of parks, or open spaces which are dedicated or recognized by appropriate local officials for activities requiring special qualities of serenity and quiet.
B	70 dBA (Exterior)	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, picnic areas, recreation areas, playgrounds, active sports areas, and parks.
C	75 dBA (Exterior)	Developed lands, properties or activities not included in categories A and B above.
D	—	For requirements on undeveloped lands see paragraphs 5a(5) and (6), this PPM.
E*	55 dBA (Interior)	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals and auditoriums.

* See paragraph 1c of this Appendix for method of application.

APPENDIX C

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